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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/901,428	07/09/2001	Craig M. Whitehouse	840.052203	8546

7590

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EXAMINER

ANDERSON, BRUCE C

ART UNIT

PAPER NUMBER

2881

DATE MAILED: 02/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/901,428

Applicant(s)

WHITEHOUSE ET AL.

Examiner

BRUCE C ANDERSON

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 September 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 33-39, 41-53 and 56-120 is/are pending in the application.
- 4a) Of the above claim(s) 66-79, 95-104, 106-111 and 115-120 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 33-39, 41-53, 56-65, 80-94, 105 and 112-114 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☒ Interview Summary (PTO-413) Paper No(s). 8.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Interference

2. Claims 115-120 of this application have been copied by the applicant from U. S. Patent No. 6,285,027. These claims are not patentable to the applicant because applicants' disclosure does not support said claims. For example, claim 115(c) alleges support from col.2, lines 50-54 of Pat. No. 6,011,259 ('259) (p.3, lines 21-23-p.4, line1 of the application); however, these lines under "BACKGROUND OF THE INVENTION" do not recite trapping both **fragmented ions and any remaining parent ions** nor are these lines directly connected to ('259)'s claimed invention.

In claim 115 (d) applicants allege support for such in column 8, lines 31-35 of ('259) (p.14, lines 2-7 of the application). In these lines no mention of periodically releasing pulses of trapped ions ... with a second mass to charge ratio is seen.

In claim 115 (e), col.7, lines 36-43 of ('259) (p.13, lines 5-12 of the application) are recited for alleged support of providing a delay. In the context of the paragraph Whitehouse ('259) is relating to a general discussion of a TOF detector, as compared to 3D ion trap of Douglas ('278). However, the term "**delay** " is not recited therein. For that matter, the term " **adjusting the delay** " alleged in col.13, lines 1-2 of ('259) (p.24, lines 8-10 of the application) is not seen. Nowhere are these well known terms recited in ('259) or the application, including the 141 claims of ('259). Hence, **if these terms** were

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specifically recited within said application, applicant needs to point out in quotations; and the particular page number and lines therein.

In regard to Count 4 or claim 99 this claim appears to be essentially the same as above Count 1 (claim 115) that does cite some other alleged support pages, but these pages do not remedy the shortcomings as stated above.

Furthermore, applicants cite another patent 5,689,111 that does not have the same inventive entity, nor is based on the same provisional application (60/002,117). Are applicants basing their counts on the application or another patent (5,689,111) to another, with an earlier filing date? Where in the application do applicants incorporate said patent (5,689,111), and for what in particular (page, line?)? In fact, this patent further strengthens the examiner's arguments that the missing terms (**delay and adjusting the delay**) should be specifically recited in the application, since a delay generator 93 is disclosed in Patent No.5, 689,111.

With regard to counts 2 and 3, it should first be noted that Chernushervich (6,285,027) is not even claiming an apparatus, only a method of using. Secondly, nowhere in the claims of Chernushervich (6,285,027) is the term "multipole ion guide" nor multiple ion guides even mentioned. The other deficiencies of said missing terms, as stated above, are not overcome.

Hence, applicants seem to be attempting to pick and choose alleged steps or elements within their entire application without specifically disclosing even an embodiment that brings said alleged steps or elements together, as per desired counts.

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An interference cannot be initiated since a prerequisite for interference under 37 CFR 1.606 is that the claim be patentable to the applicant subject to a judgment in the interference.

Response to amendment of 9-03-02

3. Newly submitted claims 66-79, 95-104, 106-107, 108-111, and 115-120 directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: claims 66, 79, 95, 99, 106, 115 are drawn to a method or an apparatus that have three distinct elements or steps not present in originally presented claims 33-65, namely, first **means to periodically pulse trapped ions**; secondly, **means for providing a delay between the release of said pulses of trapped ions**; thirdly, **means to adjust the delay**. In claims 108-111, the step of **eluding from a chemical separation system** that can be a liquid chromatograph or capillary electrophoresis (claims 110-11), was not originally presented in claims 33-65.

Since applicants have received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 66-79, 95-104, 106-107, 108-111, and 115-120 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 33-39, 41-53, and 56-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 529,885 or Douglas (736) in view of Vestal (533), Sakairi (560), and Schwartz (022); as applied in the first office action.

As stated previously EP 529,885 teaches trapping ions in at least one ion guide for a predetermined time and then releasing such to the mass analyzer (see claim 1 of EP reference).

Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 112-114 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to

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reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The step to subtract the (first) mass spectra of parent ions from the (second) mass spectra of fragmented ions to provide for third spectra containing peaks of second-generation fragmented ions, is not seen in the original disclosure.

Furthermore, in claim 114, the last step as well as the different generations of fragment ions, is not seen in the original disclosure.

Applicants are required to point out specifically the page and lines in said original disclosure to which said alleged subject matter can be found.

Double Patenting

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 80-94 and 105 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 120-141 of U.S. Patent No. 6,011,259. Although the conflicting claims are not identical, they are not

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patentably distinct from each other because in particular claims in said patent imply more than one ion guide is present , i.e. "each of said multipole ion **guides**, one of which has collision induced dissociation occurring to provide fragments thereof (claim 135).

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **BRUCE C ANDERSON** whose telephone number is 703-308-4851. The examiner can normally be reached on **MON.-FRI. 6:15AM-3:45PM** (off **ALT. FRI.**).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOHN LEE can be reached on 703-308-4116. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7721 for regular communications and 703-308-2864 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.


BRUCE C ANDERSON
Primary Examiner
Art Unit 2881

BCA
January 21, 2003